



Geel 2000 Language Schools

Math Department

Second term

Primary 6

2025/2026

Unit 8

Lesson (1)

Modeling division with fractions and whole numbers

1) Divide using the shown models:

a) $\frac{3}{5} \div 2 = \dots\dots\dots$

b) $\frac{1}{2} \div 4 = \dots\dots\dots$

c) $\frac{2}{3} \div 3 = \dots\dots\dots$

d) $\frac{3}{4} \div 3 = \dots\dots\dots$

2) Divide using the shown tape diagram:

a) $2 \div \frac{5}{6} = \dots\dots\dots$

b) $3 \div \frac{2}{5} = \dots\dots\dots$

c) $4 \div \frac{1}{2} = \dots\dots\dots$

d) $5 \div \frac{2}{3} = \dots\dots\dots$

Lesson (2)

Modeling the division of fraction by fraction

1) Divide using the shown models:

a) $\frac{2}{3} \div \frac{1}{6} = \dots\dots\dots$

b) $\frac{3}{5} \div \frac{1}{2} = \dots\dots\dots$

c) $\frac{1}{4} \div \frac{1}{3} = \dots\dots\dots$

d) $\frac{5}{8} \div \frac{3}{4} = \dots\dots\dots$

2) Use the tape diagram to answer the following questions:

You have $\frac{9}{10}$ Kg of clay , and you want to divide it into pieces. The mass of each piece is $\frac{2}{5}$ Kg . How many pieces can you make?

.....
.....
.....

Lesson (3)

Connecting Fraction Multiplication to fraction Division

1) Write the reciprocal of each the following :

a) $\frac{3}{10} = \dots$

b) $\frac{1}{15} = \dots$

c) $6 = \dots\dots$

2) Find the result :

a) $\frac{1}{3} \text{ of } \frac{2}{3} = \dots$

b) $\frac{2}{3} \text{ of } \frac{3}{5} = \dots$

c) $\frac{1}{9} \text{ of } 27 = \dots$

3) Find the result of each of the following in the simplest form:

a) $\frac{2}{5} \div \frac{3}{5} = \dots\dots$

b) $\frac{3}{8} \div \frac{3}{4} = \dots\dots$

c) $6 \div \frac{1}{3} = \dots\dots$

d) $\frac{1}{2} \div \frac{3}{10} = \dots\dots$

e) $12 \div \frac{3}{4} = \dots\dots$

f) $\frac{1}{4} \div 2 = \dots\dots$

Lesson (4)

Analyzing Fraction and decimal Multiplication and Division

1) Find the product of each of the following:

a) $2.4 \times 13 = \dots\dots\dots$

b) $2.37 \times 5 = \dots\dots\dots$

c) $0.251 \times 9 = \dots\dots\dots$

d) $1.2 \times 0.4 = \dots\dots\dots$

e) $6.8 \times 3.2 = \dots\dots\dots$

2) Find the quotient of each of the following:

a) $0.8 \div 0.2 = \dots\dots\dots$

b) $36.18 \div 0.09 = \dots\dots\dots$

c) $48.48 \div 4.8 = \dots\dots\dots$

d) $357 \div 0.7 = \dots\dots\dots$

e) $30.75 \div 4.1 = \dots\dots\dots$

3) If the price of a can of juice is 19.25 L.E. , What is the cost of

25 cans of the same kind?

.....
.....

Unit 9 (Ratio and applications)

Lesson 1

❖ Find the ratio between each of the following in the simplest form :

- 22 : 66

.....

- 96 : 63

.....

- 48 : 72

.....

❖ A class has 18 girls and 24 boys . complete in the simplest form

the ratio between :

- The number of girls and the number of boys : :

.....

- The number of boys and the number of girls : :

.....

- The number of girls and the number of class students :

..... :

- The number of boys and the number of class students :

..... :

- ❖ A factory produces 7,200 bottles of soda in 8 hours . what is the rate of production ?

.....

.....

.....

.....

❖ Ahmed spends 840 pounds a week .what is his daily spending rate ?

.....

.....

.....

.....

❖ Laila writes 640 words in 16 minutes using the computer.

Calculate the rate of lailas typing on the computer .

.....

.....

.....

.....

Lesson 2

❖ Write two equivalent ratios :

• $\frac{5}{9} = \frac{\dots\dots\dots}{\dots\dots\dots} = \frac{\dots\dots\dots}{\dots\dots\dots}$

• $\frac{8}{11} = \frac{\dots\dots\dots}{\dots\dots\dots} = \frac{\dots\dots\dots}{\dots\dots\dots}$

• $\frac{3}{8} = \frac{\dots\dots\dots}{\dots\dots\dots} = \frac{\dots\dots\dots}{\dots\dots\dots}$

• $\frac{3}{7} = \frac{\dots\dots\dots}{\dots\dots\dots} = \frac{\dots\dots\dots}{\dots\dots\dots}$

• $\frac{2}{5} = \frac{\dots\dots\dots}{\dots\dots\dots} = \frac{\dots\dots\dots}{\dots\dots\dots}$

❖ Determine whether the ratios are equivalent or not :

- $\frac{10}{11}$ and $\frac{5}{3}$

- $\frac{5}{12}$ and $\frac{25}{60}$

- $\frac{7}{6}$ and $\frac{4}{3}$

- $\frac{10}{9}$ and $\frac{20}{18}$

Lesson 3

❖ Complete the following ratio tables :

.....	2	.....	12
6	3	9	.....

.....	.....	12	100
20	15	60	.....

7	.....	20	10
.....	45	60	.....

32		20		4
----	-------	----	-------	---

.....	30		15	5
-------	----	-------	----	---

3	6	.....	15	21
4	.....	12	.....	.....

Lesson 4 & 5

❖ If 1 kg of meat is enough to feed 6 people :

- Draw a tape diagram and write numbers on it to represent the ratio of the number of kilograms of
- meat to the number of people.

.....

.....

- How many people were fed 9 kg of meat ?

.....

.....

- If there are 84 people , how many kilograms of meat is needed to feed them ?

.....

.....

.....

.....

❖ Kids car is enough to carry 3 children.

- Draw a tape diagram and write numbers on it to represent the ratio of the number of kids cars to the number of children.

.....

.....

- how many cars are enough to carry 24 children ?

.....

.....

- how many kids are there in 13 cars ?

.....

.....

Lesson 6

- ❖ put each of the following ratios into their simplest forms, then determine whether they are equivalent or not :

$$3 : 6 \quad , \quad 5 : 10$$

.....

.....

.....

$$\frac{6}{9} \quad , \quad \frac{7}{14}$$

.....

.....

.....

- ❖ find the value of x in each of the following equivalent ratios :

$$\bullet \quad \frac{5}{8} = \frac{15}{x}$$

X =

X =

$$\frac{2}{7} = \frac{x}{35}$$

$$\bullet \quad \frac{3}{x} = \frac{27}{18}$$

$$\frac{x}{5} = 3$$

X =

X =

• $\frac{5}{8} = \frac{15}{x}$

$\frac{2}{7} = \frac{x}{35}$

X =

X =

• $35 : 42 = x : 6$

$5 : 8 = 17.5 : x$

X =

X =

• $\frac{24}{x} = 0.8$

$\frac{2}{7} = \frac{x}{35}$

X =

X =

• $\frac{18}{x} = \frac{27}{48}$

$\frac{7}{x} = \frac{35}{45}$

X =

X =

Unit10

Lessons 1 to 3

(1) Complete:

- (a) Gamal studies 48 hours in 10 days, then he studies.....hour in a day.
- (b) If there are 81 liters of a water in 18 bottles, then there.....liters in 6 bottles.
- (c) A cyclist covers 6 km in 2 minutes, then he will cover..... km in 10 minutes
- (d) Malek drinks 21 cups of juice every week, then he drinks.....cups of juice in a day.
- (e) Noha spends 24 pounds in 6 days, then she will spend.....LE in 10 days.

(2) Write the following ratios as unit rates:

- (a) Twenty students are on four teams.
.....
- (b) Fourteen apples in two boxes.
.....
- (c) Eighteen bottles in three carriers.
.....
- (d) Fifty -five students are on five teams.
.....
- (e) Thirty -six crayons in nine boxes.

(3) Lila earns 20 points for every 5 stars she collects in a video game.

Complete the ratio table . Then find the unit rate:

Points	4	.....	16	20	28
Star	.....	3	.....	5	.....

.....

(4) A train travels 480 km in 3 hours. Express this speed as a unit rate . then complete the following ratio table:

Distance(km)	480	.....	1120	.....
Time (hour)	3	5	.....	9.5

.....

(5) Gehan earns 120 LE for every 6 hours she collects in her job. Complete the ratio table , then find the unit rate:

LE	20	.....	120	520	.....
Hours	.....	3	6	.....	48

(6) Fatema plays 18 hours on her mobile in 9 days. Draw a double number line to represent her rate of playing hour per day, then find her unit rate.

.....
.....
.....

(7) a factory (A) produces 600 lamps in 40 hours, and another factory (B) produces 700 lamps of the same kind in 50 hours. Which factory has a better rate of production?

.....
.....
.....

(8) Nour is making loaves of banana bread, she makes 2 loaves of banana bread , and she uses 5 cups of flour in all . How much flour does she use per loaf?

.....
.....
.....

Lesson 4 to 6

1-Identifiy which of the following (unit rate or conversion factor)

a-1day:24hours {.....}

b-18 km :1hours {.....}

c-5L:1 bottles {.....}

d-1km:1000m {.....}

e-7days:1week {.....}

f-1 LE :100 PT {.....}

g-1 kg:1000 gram {.....}

2-convert the following:

a-5700m=.....km

b-1.8 ton =.....gram

c-4.1 PT=.....LE

d-4 weeks=.....hour

e-180 minutes=.....hours

f-5500mL=.....L

g-5200 dm=.....km

h-8.02 km=.....cm

l-71500 cm=.....Km

j-2.3 ton =.....kg

3-using the appropriate conversion factor convert the following unit rates:

- a) $12 \text{ km/hr} = \dots\dots\dots = \dots\dots \text{km/min}$
- b) $280 \text{ gram/sec} = \dots\dots\dots = \dots\dots \text{kg/min}$
- c) $260 \text{ cm/sec} = \dots\dots\dots = \dots\dots \text{m/min}$
- d) $12 \text{ km/hr} = \dots\dots\dots = \dots\dots \text{m/min}$
- e) $24 \text{ cm per second} = \dots\dots\dots = \dots\dots \text{meter/minute}$
- f) $18 \text{ kg per day} = \dots\dots\dots = \dots\dots\dots \text{gram/hr}$

4-A tennis ball travels at 240 km/hr .calculate its speed in km/min .

.....

5-A person walks 15 km in 2 hours and 30 minutes .calculate his average speed in meters per minute.

.....

.....

6-An athlete runs at a constant speed of 8 m/s ,calculate his average speed in kilometers per hour.

.....

.....

7-A swimmer swim at a constant speed at 3 m/s .calcaulate his average speed in kilometers per hour.

.....

8-There is a dog running at a constant speed of 48 km/hr ,convert its speed into meters /min.

.....

9-choose the correct answer:

a-2.3ton=.....2300kg (> or < or = or otherwise)

b-24 km/hr=.....m/min (4000 or 400 or 40 or 2400)

c-2.3 pounds=.....piasters (2300 or 230 or 23 or 2.3)

d-A cyclist runs at aspeed of 42 km/hr,then his speed in meters per minute is(7 or 70 or 700 or 42000)

e-5200 dm=.....km

f-360.5 minutes 6 hours (< or > or =)

10-put (< , = , or >)

a-520km 52,000m

b-170 minutes 3 hours

c- 100 cm 10 dm

d-245 seconds 4 minutes

e-4 week 1,678 hours

f-245 seconds 4 minutes

g-780 PT 8 LE

lesson 7

1) Convert the following fractions into percentage:

a) $\frac{3}{4} = \dots\dots\dots\%$

b) $\frac{2}{5} = \dots\dots\dots\%$

c) $\frac{5}{8} = \dots\dots\dots\%$

d) $\frac{9}{20} = \dots\dots\dots\%$

e) $\frac{9}{5} = \dots\dots\dots\%$

f) $\frac{7}{25} = \dots\dots\dots\%$

2) Convert the following percentage into fractions in the simplest form.

a) 22% =

b) 80% =

c) 36% =

d) 12.5% =

e) 275% =

f) 100% =

g) 68% =

h) 1.2% =

3)

Write (< , > or =) :

a. $\frac{19}{100}$ ○ 21%

b. 0.7 ○ 7%

c. 6% ○ $\frac{1}{6}$

d. 56% ○ 0.65

e. $\frac{9}{20}$ ○ 45%

f. 10% ○ $\frac{1}{10}$

g. 55% ○ $\frac{2}{5}$

h. 38% ○ 0.038

i. 20% ○ $\frac{1}{20}$

lesson 8 to 10

1) By using given values complete the table:

- a) In a class of 40 students , only 20% of the students are participating in an art competition. How many students are not taking part in the competition?

.....	whole	Part	percent
.....			

- b) If there are 20 girls in a class with a percentage 40%, find out the number of students in the class.

.....	Whole	part	Percent
.....			

2) By using tape diagrams, find the following:

- a) 50% of 60

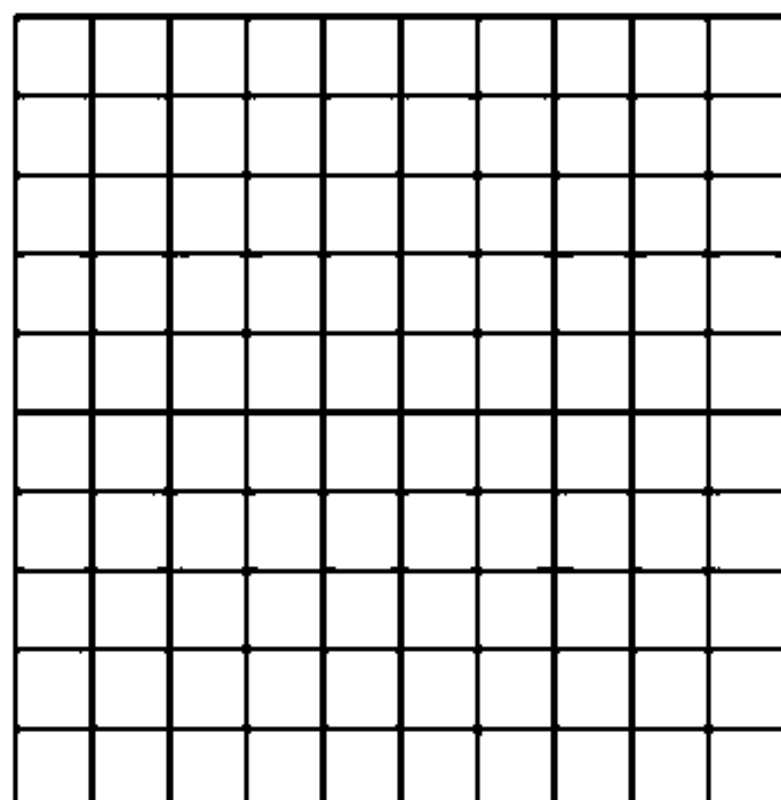
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- b) 30% of 600

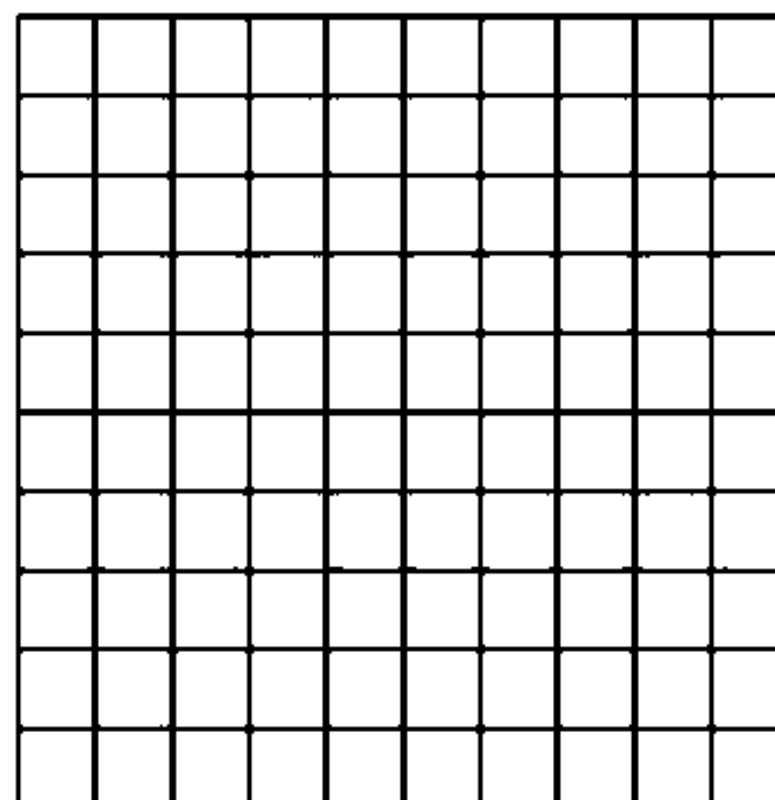
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3) By using 10 by 10 grid , find the following :

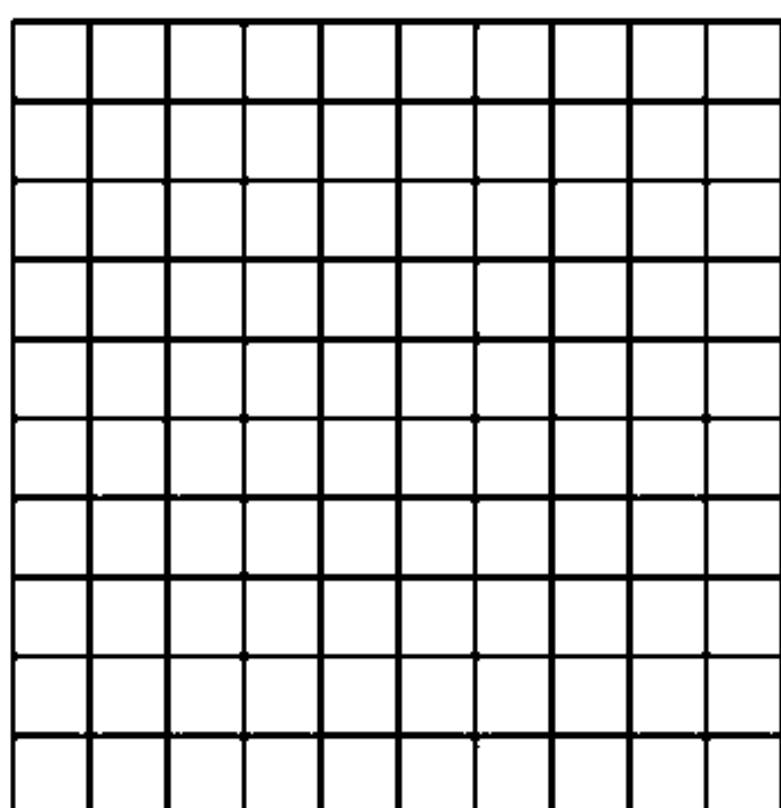
a) 15% of 400



b) 35% of 300



b) 20% of 64



4) Complete the following:

a) If 10% of a number is 36, then the number is

b) The value of 35% of 540 is

c) 9% of = 63

d) 80% of 60 =

e) $1 - 37\% =$

f) $\frac{3}{4} =$ %

g)% of 180 = 45

h) $1\frac{3}{5} =$

5) An employee saves 900 le monthly. If his monthly is 3,600 le .

a) Find the percentage of what he saves monthly.

b) Find the percentage of what he spends monthly.

.....

.....

.....

6) Nelly bought a car for 70,000 le. She paid 20% of its price. How much money did she pay ?

.....

.....

.....

7) The number of students is 880, one day, 7.5% were absent. Find the number of present students that day.

.....

.....

.....

8) Fayrouz had 200 marbles. Of which she gave 40 to omar. Find the percentage of marbles left with fayrouz now.

.....

.....

.....

.

Lesson 11

Use 1% and 10% to find each of the following.

a. 12% of 600

b. 15% of 320

c. 35% of 170

d. 41% of 25

e. 10.5% of 900

f. 20.5% of 700

Complete the following table.

	Original price	Percentage of the discount	Discount	Price after the discount
a.	560	10%	_____	_____
b.	700	15%	_____	_____
c.	450	30%	_____	_____
d.	58	15%	_____	_____
e.	90	5%	_____	_____

If a man deposited 20,000 L.E. in a bank with annual interest 15 %

Find the total amount which he gets at the end of one year.

.....

.....

The Price of a car is 800,000 L.E. The owner give a 10% discount on it but the car has not been sold yet. So he had to give another discount 5% off the reduction price.

Calculate the selling price of the car after these two reductions.

.....

.....

Unit 11

Lesson 1-3

Complete

- 1) the ordered pair representing the origin is
- 2) point $(-3,7)$ is located in the quadrant
- 3) point $(5,0)$ is located on the Axis
- 4) the image of point $(-6,6)$ reflected on y-axis is point

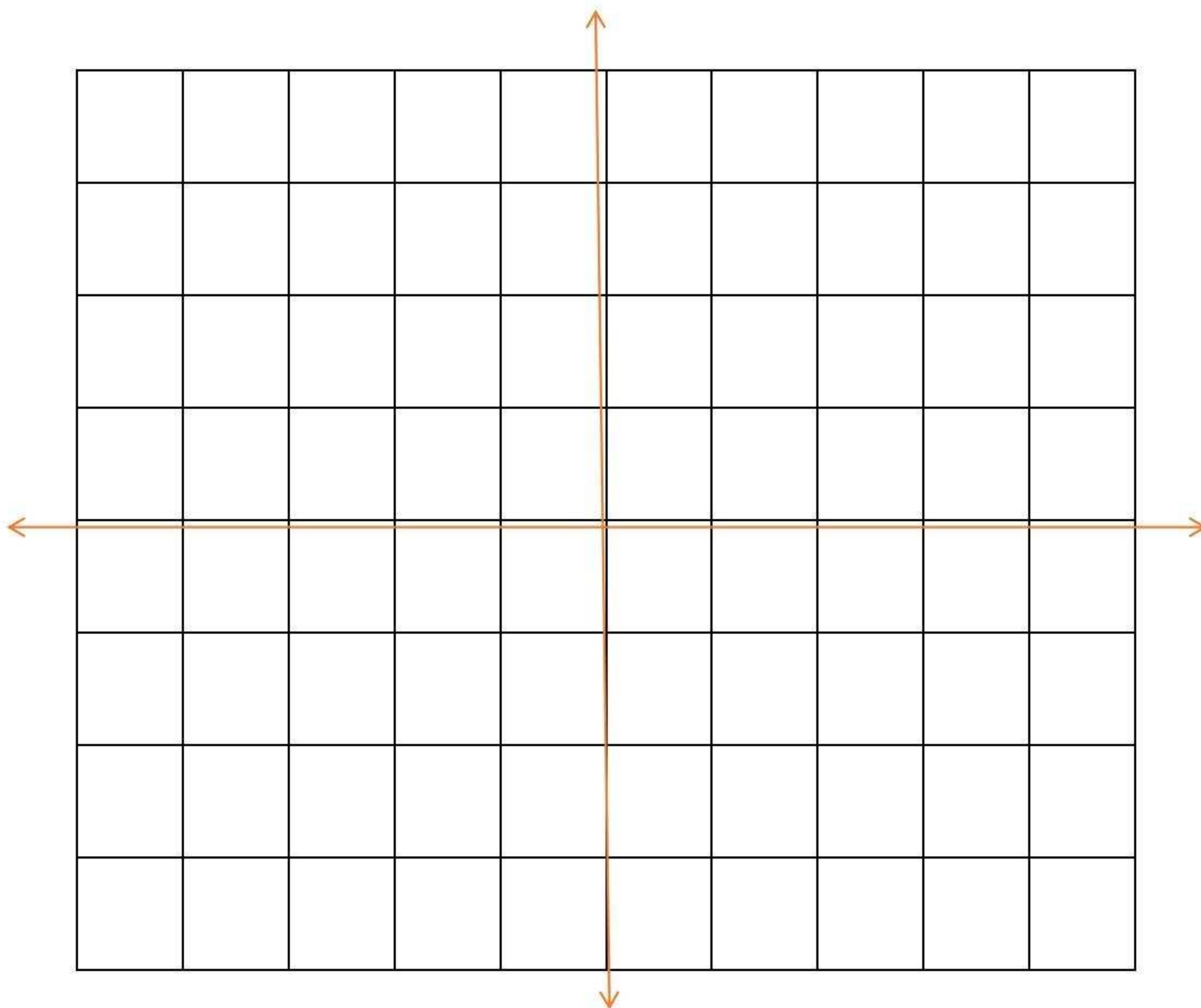
Using following coordinate plane

Locate points and complete

A $(-1,1)$

B $(1,3)$

C $(2,-3)$



The image of point A by reflection on y-axis is

The image of point B by reflection on x-axis is

The image of point C by reflection on y-axis is

Lesson 4,5

Complete

a) the distance between $(3,5)$ and $(-2,5)$ isunits

b) the two points $(5,.....)$ and $(-2,6)$ lie on the same line .

c) the distance between $(2,9)$ and $(2 ,.....)$ is 5 units

locate the following points on the coordinate plane :

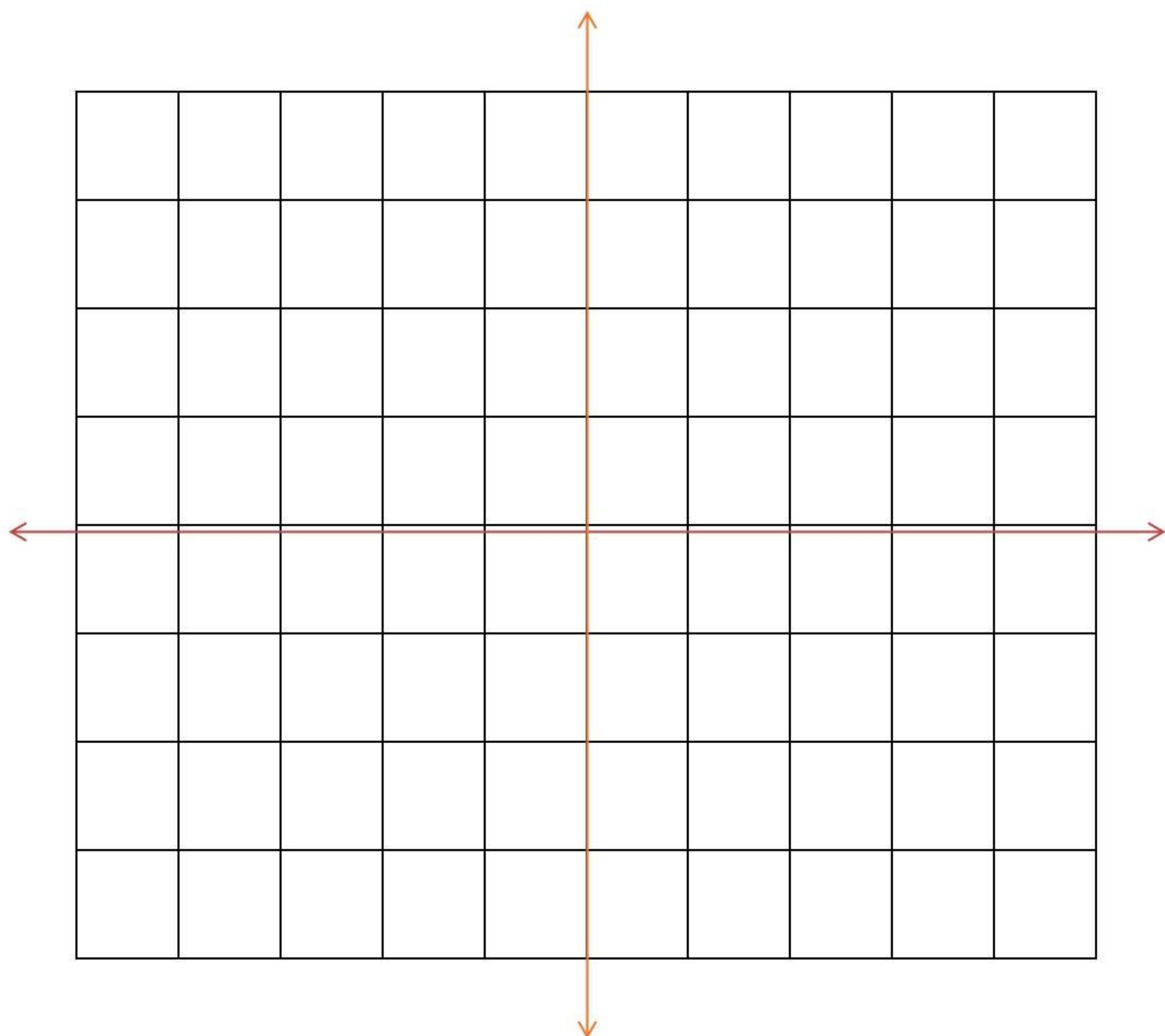
$A(3,5)$, $B(0,5)$, $C(3,5)$, $D(0,-5)$

Then find the distance between :

a) A and B =

b) A and C =

c) B and D =



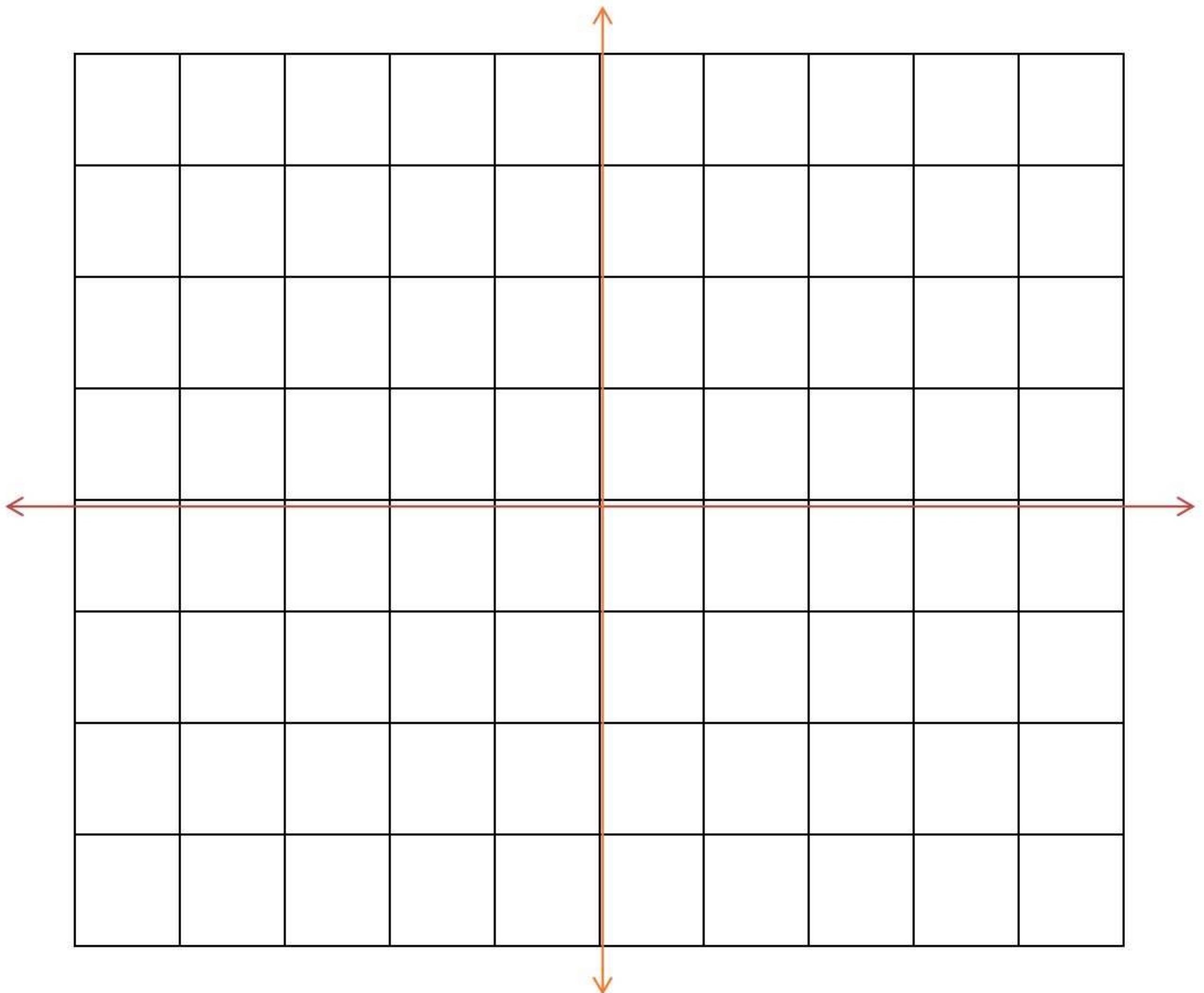
Lesson 6

1) the point $(1,2)$,plotted on the coordinate plane ,is one vertex of a square with sides 3 units long.

a) plot three additional points on the grid to complete this square

b) the coordinates of the vertecies of the square are

.....

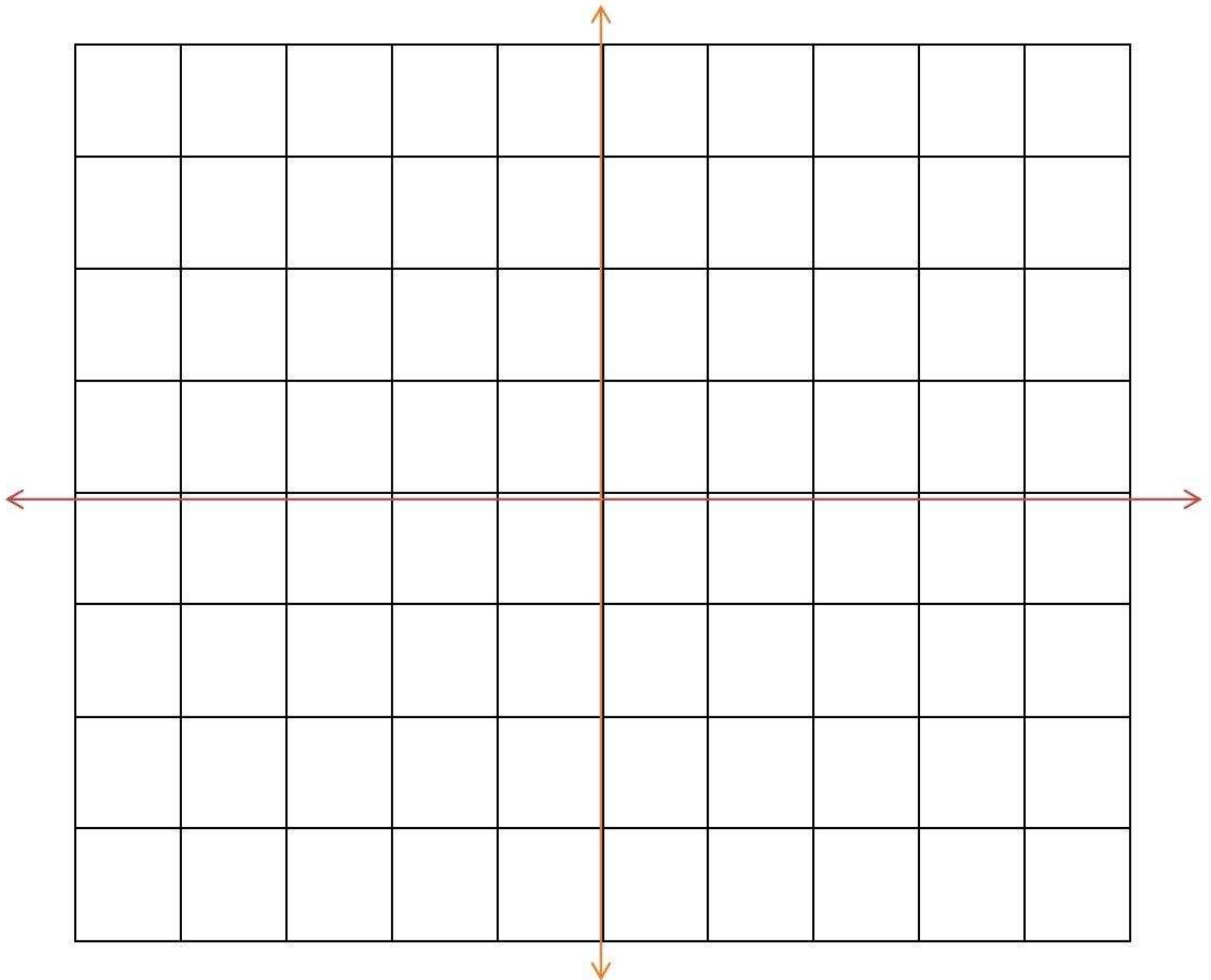


2) the point $(-3, -2)$ is one vertex of a rectangle with a length of 6 units and a width of 1 unit . using graph paper , plot 3 additional points to complete the rectangle .

a) plot three additional points on the grid to complete this square.

b) the coordinates of the vertices of the rectangle are

.....



Unit 12

Lesson 1

Area of parallelogram = half x base x height

Area of parallelogram = half x length x width x height

To small height and vice versa large base corresponds

1 Choose the correct answer:

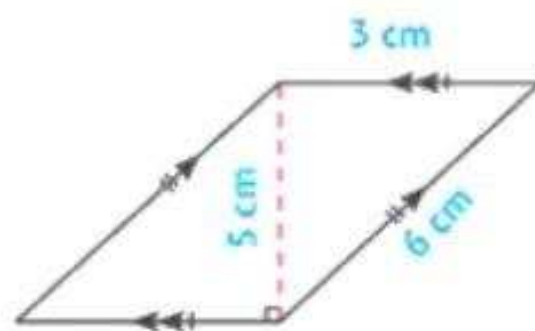
- a A parallelogram which has a right angle is called a
(square or rectangle or rhombus or trapezium)
- b If the area of a parallelogram is 36 cm^2 and its base is 4 cm, then its corresponding height is cm. (54 or 6 or 9 or 18)
- c If the dimensions of a parallelogram is $AB = 9 \text{ cm}$ and $BC = 4 \text{ cm}$, then the length of the corresponding height of AB the length of the corresponding height of BC. (> or < or = or otherwise)
- d If the base length of a parallelogram is 12 cm and its corresponding height is 4 cm, then its area is cm^2 . (3 or 8 or 36 or 48)

2 Complete the following:

- a The area of the rectangle = X
- b If a rhombus has a side length of 6 cm and its corresponding height is 3 cm, then its area is cm^2 .
- c In the parallelogram, the longer height corresponds to the side.
- d If the area of a parallelogram is 80 cm^2 and its base is 10 cm, then its

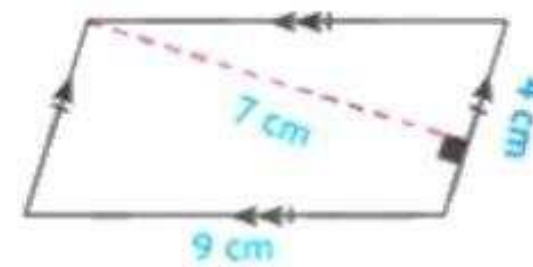
3 Find:

a



The area = cm^2 .

b



The area = cm^2 .

Lesson 2 & 3



Notes:

- Any triangle has 3 heights.
- The heights of an acute triangle always intersect inside the triangle.
- The two sides that form a right angle in a right triangle represent the two heights of the triangle.

Unit 12

1 Choose the correct answer:

- a The number of heights of a right triangle is
(0 or 1 or 2 or 3)
- b If a triangle has a base length of 8 cm and its corresponding height is 5 cm, then its area is cm^2 .
(30 or 15 or 40 or 20)
- c If the area of a triangle is 35 cm^2 and its base length is 10 cm, then the length of its corresponding height is cm.
(70 or 35 or 7 or 10)
- d If a triangle has a base length of 20 cm and its corresponding height is 7.5 cm, then its area is cm^2 .
(150 or 75 or 32.5 or 750)

2 Complete the following:

- a The area of the triangle =
- b The perpendicular line segment drawn from the vertex of a triangle to the opposite side is called a
- c If an acute triangle has a base length of 7 cm and its corresponding height is 4 cm, then its area is cm^2 .
- d The number of heights of a scalene triangle is

- e The area of the triangle = : $(\frac{1}{2} b \times h \text{ or } b \times h \text{ or } W \times L \text{ or } \frac{1}{4} b \times h)$
- f If the perimeter of an equilateral triangle is 18 cm and its area is 15 cm^2 ,

Lesson 4

First: Area of a Trapezium Using Decomposition

- 1 Divide the trapezium into a rectangle and one or two right triangles.
- 2 Calculate the area of each shape separately.
- 3 Add the area of all shapes to get the area of the trapezium.

Second: Area of a Trapezium using Composition

- 1 Complete the shape to form a rectangle.
- 2 Calculate the area of the rectangle.
- 3 Calculate the area of the triangle(s) that were added.
- 4 Subtract the area of the triangle(s) from the area of the rectangle to get the area of the trapezium.

Find the area of the following trapeziums:

Unit 12

a • Area of the rectangle

= units².

• Area of the triangle

= units².

• Area of the trapezium

= units².



b • Area of the rectangle

= units².

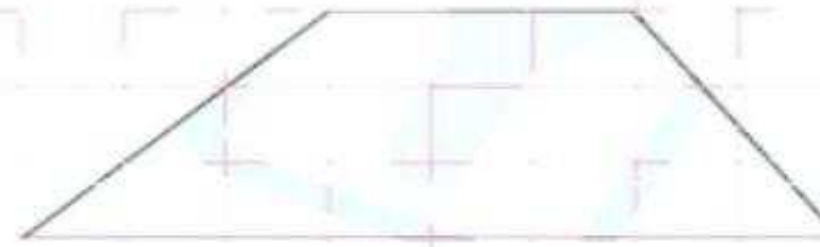
• Area of triangle (1)

= units².

• Area of triangle (2)

= units².

• Area of the trapezium = units².



c • Area of the rectangle

= units².

• Area of triangle (1)

= units².

• Area of triangle (2)

= units².

• Area of the trapezium = units².



Unit 13

Lesson 1

Complete:

- 1) Surface area of cube with edge length 4cm is cm^2
- 2) Surface area of cuboid with dimensions 2cm, 3cm and 4cm is
..... cm^2
- 3) Surface area of cube is $54cm^2$ then the area of one face is
..... cm^2
- 4) Surface area of cube =
- 5) Surface area of cuboid=
 $2 \times (\dots \times \dots) + 2 \times (\dots \times \dots) + 2 \times (\dots \times \dots)$
- 6) Surface area of cuboid with dimensions 10cm, 3cm and 8cm
is cm^2
- 7) the ratio of the area of one face of cube to its surface area
is :

Lesson 2

- 1) Ahmed made a square-based pyramid from wood if the side of the square is 5cm and the height of the triangular face is 8cm, calculate the surface area of the box.

.....
.....
.....

- 2) A pyramid of metal. The square base has a side length of about 100cm.the height of each triangular face is 70cm. what is the surface area of the pyramid ?

.....
.....

Lesson 3 & 4

- 1) Find the volume of cuboid whose dimensions are 10cm, 5cm and 2cm?

.....
.....

- 2) Find the volume of the cube with side length 5cm?

.....
.....

- 3) The dimensions of cuboid are 10cm , 5cm and 2cm.
what is the new volume if its three dimensions are doubled ?

.....
.....

Complete:

- 1) Volume of cuboid =×.....
2) is the amount of the volume measurement.

- 3) The volume of cube whose edge length is 3cm equals cm^3 .
- 4) The volume of cuboid whose dimensions are 2cm ,5cm and 6cm is cm^3 .
- 5) Volume of cuboid whose base area equals $25cm^2$ and its height equals 3cm is cm^3
- 6) The ratio between the origin volume to the new volume when two dimensions are doubled is :

موقع الدكتور محمد رزق التعليمي



امسح الباركود بالمويل لتثبيت
التطبيق وتحميل كل الملازم مجاناً وبسرعه



حمل التطبيق الآن



كورسات ونتائج امتحانات



ملازم ثانوي



ملازم اعدادي



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